

FILE ID**BPASETPRI

N 1

BBBBBBBBB PPPPPPPP AAAAAAA SSSSSSS EEEEEEEEEE TTTTTTTTTT PPPPPPPP RRRRRRRR IIIIII
BBBBBBBBB PPPPPPPP AAAAAAA SSSSSSS EEEEEEEEEE TTTTTTTTTT PPPPPPPP RRRRRRRR IIIIII
BB BB PP PP AA AA SS EE TT PP PP RR RR II
BB BB PP PP AA AA SS EE TT PP PP RR RR II
BB BB PP PP AA AA SS EE TT PP PP RR RR II
BB BB PP PP AA AA SS EE TT PP PP RR RR II
BBBBBBBBB PPPPPPPP AA AA SSSSSS EEEEEEEE TT PPPPPPPP RRRRRRRR III
BBBBBBBBB PPPPPPPP AA AA SSSSSS EEEEEEEE TT PPPPPPPP RRRRRRRR III
BB BB PP AAAAAAAAAA SS EE TT PP RR RR II
BB BB PP AAAAAAAAAA SS EE TT PP RR RR II
BB BB PP AA AA SS EE TT PP RR RR II
BB BB PP AA AA SS EE TT PP RR RR II
BBBBBBBBB PP AA AA SSSSSSS EEEEEEEEEE TT PP RR RR IIIIII
BBBBBBBBB PP AA AA SSSSSSS EEEEEEEEEE TT PP RR RR IIIIII

The diagram illustrates two sets of binary digits, L and S, arranged in a triangular pattern. The set L (left) consists of 12 digits in a 4x3 grid, while the set S (right) also consists of 12 digits in a 4x3 grid. The digits are represented by vertical bars.

```
1 0001 0 <blf/width:80>
2 0002 0
3 0003 0
4 0004 0 MODULE bpaset_pri (
5 0005 0     IDENT = '1-003'           ! Changes priority
6 0006 0     ) =                      ! File: BPASETPRI.B32
7 0007 1 BEGIN
8 0008 1 ****
9 0009 1 *
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28 0028 1 *
29 0029 1 *
30 0030 1 ****
31 0031 1
32 0032 1 <blf/uppercase_key>
33 0033 1 <blf/lowercase_user>
34 0034 1
35 0035 1
36 0036 1 ++
37 0037 1 FACILITY: VAX-11 BASIC RTL SUPPORT
38 0038 1
39 0039 1 ABSTRACT:
40 0040 1
41 0041 1     This module emulates the RSTS SYS() call to set priority.
42 0042 1
43 0043 1 AUTHOR: V. Eriksson, CREATION DATE: 17-Aug-79
44 0044 1
45 0045 1 MODIFIED BY:
46 0046 1
47 0047 1     VERSION X01
48 0048 1
49 0049 1     1-002 - Make this module conform to RTL conventions. JBS 02-DEC-1979
50 0050 1     1-003 - More of edit 002. JBS 04-DEC-1979
51 0051 1 --
52 0052 1
53 0053 1 !<blf/page>
```

```
55 0054 1 |  
56 0055 1 | SWITCHES:  
57 0056 1 |  
58 0057 1 |  
59 0058 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
60 0059 1 |  
61 0060 1 |  
62 0061 1 | LINKAGES:  
63 0062 1 |  
64 0063 1 |  
65 0064 1 |  
66 0065 1 | TABLE OF CONTENTS:  
67 0066 1 |  
68 0067 1 |  
69 0068 1 | FORWARD ROUTINE  
70 0069 1 | bpa$set_pri : NOVALUE; ! Change job priority  
71 0070 1 |  
72 0071 1 |  
73 0072 1 | INCLUDE FILES:  
74 0073 1 |  
75 0074 1 |  
76 0075 1 | REQUIRE 'RTLIN:BPASTRUCT';  
77 0166 1 |  
78 0167 1 | REQUIRE 'RTLIN:BPAFBDEF';  
79 0291 1 |  
80 0292 1 | LIBRARY 'RTLSTARLE';  
81 0293 1 |  
82 0294 1 | REQUIRE 'RTLIN:RTLPSECT';  
83 0389 1 |  
84 0390 1 |  
85 0391 1 | EQUATED SYMBOLS:  
86 0392 1 |  
87 0393 1 |  
88 0394 1 |  
89 0395 1 | PSECTS:  
90 0396 1 |  
91 0397 1 | declare_psects (bpa);  
92 0398 1 |  
93 0399 1 | OWN STORAGE:  
94 0400 1 |  
95 0401 1 |  
96 0402 1 |  
97 0403 1 | EXTERNAL REFERENCES:  
98 0404 1 |  
99 0405 1 |  
100 0406 1 |  
101 0407 1 |
```

```
103 0408 1 GLOBAL ROUTINE bpaset_pri (firqb) : NOVALUE = ! Change job priority
104 0409 1
105 0410 1 ++
106 0411 1 FUNCTIONAL DESCRIPTION:
107 0412 1
108 0413 1 If change-indicator in firqb isn't set, then return is made. Otherwise
109 0414 1 the process identification is fetched and the new priority is set.
110 0415 1 The input priority (RSTS-priority) is converted to VAX-priority in
111 0416 1 the following way:
112 0417 1 Only the last 5 bits of the RSTS priority is used which is equivalent
113 0418 1 of a division by 8. 16 is added to this value which gives priorities
114 0419 1 in the range of 0 through 31.
115 0420 1
116 0421 1 FORMAL PARAMETERS:
117 0422 1
118 0423 1     firqb = firqb-address
119 0424 1
120 0425 1 IMPLICIT INPUTS:
121 0426 1
122 0427 1     firqb [fqb$b_pri_ind] : nonzero (indicates change of priority)
123 0428 1     firqb [fqb$v_priority] : new priority
124 0429 1
125 0430 1 IMPLICIT OUTPUTS:
126 0431 1
127 0432 1     NONE
128 0433 1
129 0434 1 ROUTINE VALUE:
130 0435 1
131 0436 1     NONE
132 0437 1
133 0438 1 SIDE EFFECTS:
134 0439 1
135 0440 1     NONE
136 0441 1
137 0442 1 --
138 0443 1
139 0444 2 BEGIN
140 0445 2
141 0446 2 MAP
142 0447 2     firqb : REF $fqb_def;           ! Defines firqb
143 0448 2
144 0449 2 LOCAL
145 0450 2     sts;                      ! Status from $setpri
146 0451 2
147 0452 2
148 0453 2 Check input.
149 0454 2
150 0455 2
151 0456 2 IF .firqb [fqb$b_pri_ind] EQLU 0 THEN RETURN;
152 0457 2
153 0458 2
154 0459 2 Convert RSTS-priority to VAX-priority and set the new priority.
155 0460 2
156 0461 2
157 0462 3 IF NOT (sts = $setpri (pri = .firqb [fqb$v_priority] + 16))
158 0463 2     THEN
159 0464 2     RETURN SIGNAL (.sts);
```

BPASET_PRI
1-003

E 2
16-Sep-1984 01:40:00 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:56:53 [BASRTL.SRC]BPASETPRI.832;1

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(3)

: 160 0465 2
: 161 0466 1 END;

! End of bpa\$set_pri

```
.TITLE BPASSET_PRI  
.IDENT \1-003\  
.EXTRN SYSSSETPRI  
.PSECT _BPASCODE,NOWRT, SHR, PIC,2
```

				0000 0000	.ENTRY	B\$ASSET_PRI, Save nothing	: 0408
		50	04	AC D0 00002	MOVL	FIRQB, R0	: 0456
			05	A0 95 00006	TSTB	5(R0)	
				20 13 00009	BEQL	1\$	
				7E D4 0000B	CLRL	-(SP)	: 0462
	7E	06 A0	05	03 EE 0000D	EXTV	#3, #5, 6(R0), -(SP)	
			6E	10 C0 00013	ADDL2	#16, -(SP)	
				7E 7C 00016	CLRQ	-(SP)	
		00000000G	00	04 FB 00018	CALLS	#4, SY\$SETPRI	
			09	50 E8 0001F	BLBS	STS, 1\$	
		00000000G	00	50 DD 00022	PUSHL	STS	: 0464
				01 FB 00024	CALLS	#1, LIB\$SIGNAL	
				04 0002B 1\$: RET			: 0466

; Routine Size: 44 bytes, Routine Base: _BP\$CODE + 0000

162 0467 1
163 0468 1 END
164 0469 1
165 0470 0 ELUDDOM

! End of module bpa\$set_pri

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
_BPASCODE	44	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	Total	Loaded	Percent	Pages Mapped	Processing Time
_S255\$DUA28:[SYSLIB]STARLET.L32;1	9776	3	0	581	00:01.1

COMMAND QUALIFIERS

```
| :      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS:BPASSETPRI/OBJ=OBJ$:BPASSETPRI MSRC$:BPASSETPRI/UPDATE=(ENH$:BPASSETPRI  
| :  
| :  
: Size:        44 code + 0 data bytes  
: Run Time:    00:05.1  
: Elapsed Time: 00:13.7  
: Lines/CPU Min: 5529  
: Lexemes/CPU-Min: 25823  
: Memory Used: 55 pages  
: Compilation Complete
```

0035 AH-BT13A-SE
VAX/VMS V4.0

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